Idaho Department of Health and Welfare

Idaho Disease BULLETIN

Volume 8 Number 3 *Division of Health* *July, 2001*

West Nile Virus Spreads in 2001

West Nile virus (WNV), the emergent arboviral disease first discovered in the continental United States in 1999 in the greater New York City area, continues to make its way across the country. WNV is not currently found in Idaho, but it is estimated that West Nile virus will become a health issue for our residents within the next 5 years. (See the October 2000 issue of the Idaho Disease Bulletin for a more thorough discussion of WNV.)

Mosquito-borne transmission to humans tends to occur later in the summer and fall, but environmental samples of birds, horses, and mosquitoes have already demonstrated the presence of virus in the eastern United States in 2001.

In 1999, virus was detected among humans and veterinary species in the greater New York City and New Jersey area. By 2000, evidence of the virus was found as far north as New Hampshire and as far south as North Carolina. Although it is still early in the 2001 transmission season, virus has already been detected in NY, NJ, CT, RI, MD, GA and FL and is expected to move into other new ecosystems by the end of the 2001 season. This is the first year that the virus has been discovered in Florida or Georgia.

This year, in preparation for the expected eventual movement of the virus westward, Idaho is enhancing arboviral surveillance efforts in several ways:

1. Physicians are encouraged to contact Roy Moulton at the Bureau of Laboratories at 334-2235 x 228 for arboviral testing of CSF or serum from any undiagnosed case of encephalitis.
2. Mosquito surveillance for arboviruses is being piloted in the Lake Lowell region this mosquito season.
3. Veterinarians and wildlife professionals are encouraged to submit dead wild birds and serum from ill horses to the Bureau of Laboratories for arboviral testing.

Inside:

This fall, this bulletin will provide summary data on year-end WNV surveillance efforts.

Disease Counts for 2000 Finalized

The counts of reported disease in Idaho have been finalized for 2000. Notably, the number of pertussis cases decreased from 1999 and hepatitis A numbers were also down from 1999; however, the number of HIV and AIDS cases increased from prior years. Several additions were made for the 2000 reporting year, including the addition of Hantavirus Pulmonary Syndrome (HPS), listeriosis, cryptosporidiosis, non-O157:H7 toxigenic *E. coli*, and rabies post-exposure prophylaxis. Herpes virus infections were removed from the reportable disease list.

For more details on Idaho reporting requirements, refer to the Rules and Regulations Governing Idaho Reportable Diseases (May 1, 2000 edition). A copy was mailed to all physicians within the state of Idaho. A poster version is also available free of charge. If you did not receive a copy of the rules booklet and wish a copy or a poster, please contact Judi at the state Epidemiology Program at 208-334-5939. Future bulletin issues will discuss some individual diseases reported in Idaho and how they compare with reports from previous years.

Disease	Total Reported in 2000
AIDS	27
Amebiasis	1
Bacterial meningitis, other	1
Blood lead	66
Botulism	0
Brucellosis	0
Campylobacteriosis	252
Chlamydia	1907
Cryptosporidiosis	28
E. coli O157:H7	73
E. coli, toxigenic non 0157:H7	4
Food poisoning	8
Giardiasis	139
Gonorrhea	98
Haemophilus influenzae infections	4
Hantavirus pulmonary syndrome	0
Hemolytic uremic syndrome (HUS)	0
Hepatitis A	45
Hepatitis B	88
Hepatitis C (non acute)	983
Hepatitis C (acute)	3
HIV	55
Legionellosis	5
Leprosy (Hansen's disease)	1
Leptospirosis	1
Lyme disease	4
Malaria	5
Meningititis, viral or aseptic	16
Mumps	1
Neisseria meningitidis, invasive	7
Pneumocystis carinii pneumonia (PCP)	5
Pertussis	64
Psittacosis	0
Q-fever	1
Rabies, animal	10 bats
Rabies post-exposure prophylaxis	4
Rocky Mountain Spotted Fever	1
Rubella	0
Rubeola (Measles)	0
Salmonellosis	132
Shigellosis	44
Strep A, invasive	16
Syphilis	11
Tuberculosis	16
Toxic shock syndrome (TSS)	7
Typhoid fever	1
Yersiniosis	1

Salmonella Outbreak

Friends and family members suffered diarrhea and vomiting, and four were hospitalized a few days after attending a recent birthday party. A physician alerted the health department to the outbreak after seeing an ill person in the local emergency room, which allowed the district health department to respond quickly.

Many foods were served at the birthday celebration, including hamburgers, cabbage salad, potato salad, homemade cookies, cake and ice cream. Within 48 hours of the celebration, 13/20 participants were suffering from a gastrointestinal disorder (65% attack rate).

Salmonella enterica, serovar Enteritidis (SE) was the culprit. With such a high attack rate, a limited menu selection, and the fact that everyone ate a little of everything, traditional epidemiologic methods including a thorough food history were not very helpful in determining the culprit food item. Although suspected because raw eggs were a component of the homemade ice cream, it was not until the Bureau of Laboratories was able to culture *S*E out of the ice cream, and demonstrate a molecular match to the human isolates derived from stool culture, that the suspect food item was confirmed.

This outbreak demonstrates how critical stool and food samples are to a complete epidemiologic investigation. Early reporting increases the likelihood that stool and food samples will still be available for testing.

In this case, party participants were educated in the proper handling of raw eggs. One additional case has been identified; it appears that this person became exposed while caring for one of the victims.

Shell Eggs and Salmonella

From 1985 to 1998, there have been a total of 796 SE outbreaks reported to the Centers for Disease Control and Prevention (CDC) involving 28,689 illnesses, 2,839 hospitalizations and 79 deaths. Eggs are responsible for approximately 82% of SE outbreaks with a confirmed source.

According to the Food and Drug Administration (FDA), SE may contaminate shell eggs in three ways: prior to shell formation within the chicken, on the outside of the shell as it passes from the chicken, or through pores in the eggshell after laying. FDA estimates that one in 20,000 eggs is infected with SE. This translates into a total of about 3.36 million eggs annually, which have the potential to expose a large number of people to this pathogen.

Raw egg consumption is never advised. If persons insist on using recipes that call for eggs that are raw or undercooked such as Caesar salad dressing and homemade ice cream, they should use either shell eggs that have been treated to destroy *Salmonella* by pasteurization or another approved method, or pasteurized egg products. Treated shell eggs are available from a growing number of retailers and are clearly labeled. Thorough cooking, which kills viable SE, is the preferred method prior to egg consumption in any recipe.

The FDA and the U.S. Department of Agriculture are working together to eliminate SE illnesses associated with the consumption of eggs by 2010, through an aggressive education and labeling campaign. The interim goal of the Egg Safety Action Plan is a 50 percent reduction

in egg-associated SE illnesses by 2005.

A helpful FDA consumer targeted website on safe egg handling can be found at the following address: www.cfsan.fda.gov/~dms/fs-eggs.html

Bartonella Testing for FUO

The Centers for Disease Control and Prevention (CDC) is investigating the potential role of rodent-borne *Bartonellae* as a cause of fever of unknown etiology (FUO) in persons living in the western United States. The CDC Human Subjects Committee has approved a protocol to obtain blood samples from patients with FUO who have had possible exposure to wild rodents. Samples will be tested for antibody to rodent-associated *Bartonellae.* Bacterial culture and polymerase chain reaction (PCR) tests may also be performed. Patients will need to provide informed consent and respond to a questionnaire about their animal exposure. If you have patients who you think might be eligible for this study contact Dr. Hahn or Dr. Tengelsen at the State Epidemiology Program.

Idaho Disease Bulletin
Epidemiology Services
P.O. Box 83720
450 W. State St., 4th Floor
Boise, ID 83720-0036
http:www.idahohealth.org
(208)334-5939

Editors:
Christine G. Hahn, MD
State Epidemiologist

Leslie Tengelsen, PhD, DVM
Deputy State Epidemiologist

For 24-hour disease reporting: 1-800-632-5927

Idaho Disease
Bulletin
Idaho Department of Health and Welfare
Division of Health
P.O. Box 83720
Boise ID 83720-0036

PRSRT STD
U.S. POSTAGE
PAID
PERMIT NO. 1
BOISE, ID